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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,839	09/12/2003	Timothy L. Barnard	Barnard.1514	7853

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EXAMINER	
NGUYEN, BINH AN DUC	
ART UNIT	**PAPER NUMBER**
3714	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/660,839	BARNARD, TIMOTHY L.	
	Examiner	Art Unit	
	Binh-An D. Nguyen	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/16/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because:

On page 4, line 12, the recited term "a batter voltage monitor" should be changed to "a battery voltage monitor". Correction is required. See MPEP § 608.01(b).

On page 7, line 6, a period (.) should be deleted.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-7, 9, 12, 13, and 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoon (US 2002/0022530 A1).

Referring to claim 1, Yoon teaches a golf putt measuring device (Figs. 2, 4) comprising: a body having a first side and a second side; said body having a top side and a bottom side wherein the bottom side is placed on a generally flat surface; a microprocessor controlled processing means (processor 170) to measure speed and distance of a golf ball (paragraph 25); emitters and detectors (optical sensors 162a, 162b; Fig.4) placed inside the body of the device to detect an object as it passes in front of the emitters and detectors (paragraph 36); a power means (Fig.6) for powering the golf putt measuring device a display means (186) on the top side of the body (Fig.4).

Note that, the claimed emitters and detectors are equivalent to Yoon sensor 162a or 162b (see Fig 4) which emits infrared signals and detects the signals bounced back from the golf ball.

Referring to claims 12 and 20, Yoon teaches a method for using a golf putting device, the method comprising the steps of: providing a golf measuring device (Figs.2, 4) having a body with a first side and a second side wherein the body has a top side and a bottom side; providing a display means on the top side of the device (Fig.4); providing a plurality of emitters and detectors (optical sensors 162a, 162b; Fig.4) within the body of the device wherein the emitters and detectors can sense movement (paragraph 36); providing a power source to power the device (Fig.6); providing a microprocessor (processor 170) to manage the emitters and detectors, collect data from the emitters and detectors and display information collected on the display mean (186). Referring to the limitation of turning the device on or off, this step could at least be done by unplugging the power plug of Yoon's golf putt measuring device. Note that, the claimed emitters and detectors are equivalent to Yoon sensor 162a or 162b (see Fig 4) which emits infrared signals and detects the signals bounced back from the golf ball.

Referring to claims 3, 13, 16, 17, and 19, Yoon teaches a plurality of emitters and detectors are used to measure the speed of a golf ball as the ball passes in front of the emitters and detectors (paragraph 36); allowing a user to putt a golf ball in front of the device wherein the emitters emit a infrared pulse that bounces off the ball and back to the detectors (Fig.4); putting a golf ball in front of the device wherein the golf ball travels from one side of the device to the second side of the device (Fig.4); emitting an infrared

signal from the emitters to be ricocheted off the ball as it travels past the emitter and collecting the signal by using the detectors (Fig.4); and converting the data received from the detectors into a power rating value that relates to the speed and distance the ball travels (paragraphs 14, 36).

Referring to claim 2 Yoon teaches the emitters and detectors are infrared emitters and infrared detectors (paragraph 31).

Referring to claim 5, wherein the infrared emitters are pulsed using a specific pulse width and as an object passes in front of at least one of the emitters, the infrared signal is reflected back to a detector, this limitation is inherent from Yoon's utilizing of optical sensors 162.

Referring to the limitations of a microprocessor controlled counter that runs until a ball passes by a plurality of emitters and detectors (claim 6); and the counter converts the data received from the emitters and detectors and displays a power rating value relating to the speed of the ball wherein the power rating is displayed on the display means (claim 7), these limitation are inherent from Yoon's teaching of clock generator 172 (Fig.3, paragraph 40) which provides reference clock so that the algorithm processor 170 can perform a time calculation (paragraphs 40-42, 52).

Referring to claims 9 and 15 Yoon teaches providing and audio feedback mechanism (or feedback means) (192, 194) to inform the user by audio cue of the putting result (Fig. 3; paragraph 26).

Referring to claim 18 Yoon teaches processing the data received from the detectors (paragraph 25, 36).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4, 8, 10, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoon (US 2002/0022530 A1).

Yoon teaches all limitations of claims 1-3, 5-7, 9, 12, 13, and 15-20 above.

Referring to claim 4, Yoon further teaches the emitters and detectors are spaced apart (e.g., distance "s" (paragraph 36, Fig.4)) from the plurality of other emitters and detectors (Fig. 4). Note that, the claimed emitters and detectors are equivalent to Yoon sensor 162a or 162b (see Fig 4) which emits infrared signals and detects the signals bounced back from the golf ball. Yoon does not explicitly state that the emitters and detectors are placed at lease one half inch off the bottom of the golf putt measuring device, however, it would have been obvious to place the sensors as high as the center of the golf ball (from the ground up) to maximize the reflection area for accurate signal reading.

Referring to the limitation of a battery voltage monitor is utilized such that when the voltage of the power supply changes, the pulse width of the emitters also change to improve performance of the emitters such that when power supply is low, the emitters and detectors will work at a different pulse width for peak efficiency (claim 8), in the

electronic age where multiple power sources are often utilized in portable electronic devices, *e.g., power from battery or wall outlet*, it would have been obvious to regulate power sources to provide a stable the pulse width thus maintain the accuracy of the sensors in electronic devices.

Referring to claims 10 and 14, Yoon does not explicitly disclose the golf putt measuring device executes a software that allows the user to manipulate the device for training purpose or for game purposes, however, it is obvious in the game/sports industry to provide both game mode, *e.g., keeping scores*, and training mode in a training apparatus to motivate the users thus bring forth positive training results.

Referring to claim 11, Yoon does not explicitly disclose an on/off button in the golf putting device that resets the microprocessor allowing the microprocessor to turn itself off or on, however, in electronic devices, it would have been obvious to provide an on/off button to provide the convenience to the user.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh-An D. Nguyen whose telephone number is 571-272-4440. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on 571-272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BN

Robert E Pezzuto
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Art Unit 3714